



CELEBRATING
OUR CENTENARY



ENGINEERS
AUSTRALIA

Hall of Fame Inductees

Engineering Heritage Queensland

Prof Mansergh SHAW OBE

FIEAust

1910 - 1993

INDUCTED IN 2010

Mansergh was educated at Sheffield Technical School and at Sheffield University where he completed his Master's degree. Appointed Senior Lecturer at Melbourne University in 1938, he assisted the war effort by developing new methods of production, and the design and construction of machines for ruling the graticules of optical measuring instruments.

In 1949, Mansergh was appointed the Foundation Professor of Mechanical Engineering, UQ. His metrology laboratory was registered with NATA for which he acted as an assessor and led to his appointment to the advisory committee on the future of the National Standards Laboratory.

The Queensland sugar industry owes much to Mansergh's supervision of research into milling. The first instrumented mill in the world was constructed in his department to determine forces and juice flows and this eventually led to a theory of mill operation.

Fundamental properties of the prepared cane, such as friction coefficient and permeability, were researched. A computer program was developed to calculate the efficiency and the extraction of the mill for different settings and enable optimum operation of the milling

train. He was elected Chair of the Engineering Section of the 1974 International Society of Sugar Cane Technologists Conference in Durban.

Another major research effort concerned the stability and safety of agricultural tractors. Field trials for the handling of the tractor under various loads and operating on different terrains enabled the design of improved tractors. He directed a survey into tractor accidents to pinpoint where design faults in the tractor were contributing factors.

He was involved in the development of the QIT as well as the regional Universities: James Cook University, Capricornia and Darling Downs. He was Chair of the Australian Branch of the International Mechanical Engineering Congress and Exposition for many years. He was a member of the inaugural committee of the Australian Branch, Institution of Production Engineers.

He became Chair, Queensland Division of Engineers Australia in 1956 and a member of Council. For his services to the Australian Institute of Management, he was made an Honorary Life Fellow.